WHAT IS CLAIMED IS:

1. An apparatus for connecting a line for conveying articles with a feeding line having a different pitch, the apparatus including:
a plurality of carriages, connected to said conveying line, each carriage supporting removably at least one corresponding seat for receiving at least one article;
conveying means, having a plurality of pins capable of engaging with corresponding recesses made in said carriages, to drive the latter spaced apart with a first distance, along a selected forward movement direction;
first means for supporting and guiding said carriages in the forward movement direction;
second means for supporting and guiding said conveying means and for making the corresponding pins to engage with the said recesses made in the said carriages for driving said carriages spaced apart by said first distance, in a first area of the apparatus, and for making said pins disengage from the relevant recesses of said carriages, in a second area of the apparatus;
means for driving said carriages in the forward movement direction, in said second area of the apparatus, so that the said carriages are moved with a pitch changed between said first distance and a second distance, different from the first, substantially equal to the pitch of the feeding line;
means for the mutual removable coupling of each of said carriages with said driving means, in said second area of the apparatus; said driving means being operated in phase relation with said conveying means, so as to move continuously said carriages during their transition between said first area and said second area.

2. An apparatus, as claimed in claim 1, further including working means, operated in phase relation with said driving

means for transferring said articles (4a) present in the seats connected to said carriages, to the feeding line, in a region corresponding to at least said second area.

3. An apparatus, as claimed in claim 1, wherein said driving means include at least one worm screw arranged longitudinally with respect to said forward movement direction, centrally with respect to the carriages, for moving the carriages in said second area of the apparatus, with a pitch varied gradually between said first distance, in the transition sections between the first area and the second area, and the second distance.

4. An apparatus, as claimed in claim 3, wherein said mutual coupling means include rollers, situated in the lower part of each carriage and aimed at engaging removably with a groove defined by the variable pitch helical path of the worm screw, in said second area of the apparatus, so as to move continuously the carriages transiting between said first area and said second area of the apparatus.

5. An apparatus, as claimed in claim 1, wherein said conveying means include at least one endless conveying chain mounted on corresponding driving wheels and driven wheels, and having a plurality of pins for engaging corresponding recesses made in said carriages, to drive firmly the carriages spaced apart with said first distance, along said forward movement direction.

6. An apparatus, as claimed in claim 5, wherein said second support and guide means include at least one support wall, situated beside said carriages and featuring at least one groove for receiving said conveying chain firmly, and for guiding longitudinally and/or transversely said conveying chain; and in that said groove is shaped in such a way as to

make said pins engage with the recesses of said carriages, in said first area, and to make said pins disengage from the recesses of said carriages, in said second area.

7. An apparatus, as claimed in claim 6, wherein said first support and guiding means include at least one longitudinal flat projection joined to said support wall for engaging freely with corresponding notches made laterally on the carriages to guide longitudinally and/or crosswise the carriages.

8. An apparatus, as claimed in one of the claims from 1, wherein said conveying means include a pair of substantially parallel side-by-side conveying chains, having a plurality of pins for engaging with corresponding recesses made on both sides of said carriages, to pull firmly the carriages spaced apart with said first distance in said forward movement direction.

9. An apparatus, as claimed in claim 8, wherein said second support and guiding means include a pair of support walls, which are situated on both sides of said carriages, each wall of said support wall featuring at least one groove for receiving a corresponding conveying chain to be guided longitudinally and/or crosswise; and in that each groove has such a shape, as to impose engagement of the pins with the recesses of said carriages, in said first area, and to impose disengagement of the pins from the recesses of the carriages, in said second area.

10. An apparatus, as claimed in claim 9, wherein said first support and guiding means include a pair of longitudinal flat projections, carried by said support walls for engaging freely with corresponding notches made in both sides of said

carriages, in order to be guided longitudinally and/or crosswise.

11. An apparatus, as claimed in claim 1, further including fastening means, for connecting removably each of said seats to the corresponding carriage.

12. An apparatus, as claimed in claim 11, wherein said fastening means are simple or double dovetail joint, which can be removed transversely with respect to the forward movement direction.

13. An apparatus, as claimed in claim 1, wherein said conveying line is fed upstream of a packaging line.

14. An apparatus, as claimed in claim 1, wherein said feeding line supplies articles to a boxing machine, situated in cascade thereto.